

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application:

LISTING OF CLAIMS:

1-33. (Cancelled)

34. (Currently amended) In a data communications device, a method for managing a flow of packets, comprising:

transferring packets of a particular packet flow from input ports to output ports of the data communications device based on an initial policy scheme controlling an initial manner in which the packets are transferred from the input ports to the output ports of the data communications device;

planning a scheme change to change the initial policy scheme to a new policy scheme based on transfer conditions within the data communications device existing while transferring the packets of the particular flow based on the initial policy scheme, the new policy scheme controlling a new manner in which the packets are transferred from the input ports to the output ports of the data communications device; and

providing a change signal to a source of the particular packet flow, the change signal indicating that the data communications device has planned the scheme change,

wherein the data communications device is a first computerized node of a network, the source of the particular packet flow is a second computerized node of the network coupled to the first computerized node by a packet transmission medium, and providing the change signal comprises transmitting a change signal packet into the network destined for the second computerized node

and further comprising:

accepting a reply signal from the source;

changing the initial policy scheme to the new policy scheme when contents within a reply field of the reply signal represent a first value; and

maintaining the initial policy scheme when the contents within the reply field of the reply signal represent a second value that is different than the first value.

35. (Original) The method of claim 34 wherein the initial policy scheme is an initial packet dropping scheme for dropping packets from the particular packet flow, and wherein the new policy scheme is a new packet dropping scheme for dropping packets from the particular packet flow in a manner that is different than that of the initial packet dropping scheme.
36. (Original) The method of claim 34 wherein the initial policy scheme is an initial packet scheduling scheme for scheduling packets of the particular packet flow for transmission, and wherein the new policy scheme is a new packet scheduling scheme for scheduling packets of the particular packet flow for transmission in a manner that is different than that of the initial packet scheduling scheme.
37. (Original) The method of claim 34 wherein the initial policy scheme is an initial packet classification scheme for classifying packets of the particular packet flow, and wherein the new policy scheme is a new packet classification scheme for classifying packets of the particular packet flow in a manner that is different than that of the initial packet classification scheme.
38. (Currently amended) The method of claim 34, wherein the reply signal directs the data communications device to cancel the scheme change, and further comprising:

- ~~receiving, from the source, a reply signal directing the data communications device to cancel the scheme change; and~~  
canceling the scheme change in response to the reply signal.
39. (Original) The method of claim 38 wherein transferring the packets includes:
- transferring packets of the particular packet flow having a first priority prior to the step of receiving the reply signal; and
  - transferring packets of the particular packet flow having a second priority that is different than the first priority after the step of receiving the reply signal.
40. (Original) The method of claim 38 wherein transferring the packets includes:
- transferring packets of the particular packet flow having a first size prior to the step of receiving the reply signal; and
  - transferring packets of the particular packet flow having a second size that is different than the first size after the step of receiving the reply signal.
41. (Original) The method of claim 38, further comprising:
- in response to the reply signal, attempting to plan the scheme change for a packet flow that is different than the particular packet flow.
42. (Currently amended) The method of claim 34, wherein the reply signal accepts the scheme change, and further comprising:
- ~~receiving, from the source, a reply signal accepting the scheme change; and~~
  - changing, in response to the reply signal, the initial policy scheme to the new policy scheme such that packets of the particular packet flow

subsequently are transferred based on the new policy scheme rather than the initial policy scheme.

43. (Currently amended) The method of claim 34, further comprising:
- detecting an occurrence of a timeout condition indicating that, since the change signal was provided, a timeout period has elapsed without receiving a the reply signal from the source; and
  - changing, in response to the occurrence of the timeout condition, the initial policy scheme to the new policy scheme such that packets of the particular packet flow subsequently are transferred based on the new policy scheme rather than the initial policy scheme.

44. (Cancelled)

45. (Currently amended) The method of claim ~~44~~34 wherein the change signal includes a query field containing a confirmation code, and wherein accepting the reply signal from the source includes:
- receiving the reply signal from the source;
  - authenticating the reply signal based on a comparison of contents of a query field of the reply signal with the confirmation code.

46. (Currently amended) A data communications device for managing a flow of packets, comprising:
- a transfer circuit that transfers packets of a particular packet flow from input ports to output ports of the data communications device based on an initial policy scheme controlling an initial manner in which the packets are transferred from the input ports to the output ports of the data communications device;
  - a controller, coupled to the transfer circuit, that plans a scheme change to change the initial policy scheme to a new policy scheme in

response to a particular transfer condition within the data communications device existing while the transfer circuit transfers the packets of the particular flow based on the initial policy scheme. the new policy scheme controlling a new manner in which the packets are transferred from the input ports to the output ports of the data communications device; and

a feedback circuit, coupled to the controller, that provides a change signal to a source of the particular packet flow, the change signal indicating that the data communications device has planned the scheme change,

wherein the data communications device is a first computerized node of a network, the source of the particular packet flow is a second computerized node of the network coupled to the first computerized node by a packet transmission medium, and the feedback circuit is operative when providing the change signal to cause the transmission of a change signal packet into the network destined for the second computerized node,

and wherein the feedback circuit is further operative to:

accept a reply signal from the source; and

instruct the controller to (1) change the initial policy scheme to the new policy scheme when contents within a reply field of the reply signal represent a first value, and (2) maintain the initial policy scheme when the contents within the reply field of the reply signal represent a second value that is different than the first value.

47. (Original) The data communications device of claim 46 wherein the initial policy scheme is an initial packet dropping scheme for dropping packets from the particular packet flow, and wherein the new policy scheme is a new packet dropping scheme for dropping packets from the particular packet flow in a manner that is different than that of the initial packet dropping scheme.

48. (Original) The data communications device of claim 46 wherein the initial policy scheme is an initial packet scheduling scheme for scheduling packets of the particular packet flow for transmission, and wherein the new policy scheme is a new packet scheduling scheme for scheduling packets of the particular packet flow for transmission in a manner that is different than that of the initial packet scheduling scheme.
49. (Original) The data communications device of claim 46 wherein the initial policy scheme is an initial packet classification scheme for classifying packets of the particular packet flow, and wherein the new policy scheme is a new packet classification scheme for classifying packets of the particular packet flow in a manner that is different than that of the initial packet classification scheme.
50. (Currently amended) The data communications device of claim 46 wherein the reply signal directs the data communications device to cancel the scheme change, and the feedback circuit is configured to:
- ~~(i) receive, from the source, a reply signal directing the data communications device to cancel the scheme change; and~~
  - (ii) instruct the controller to cancel the scheme change in response to the reply signal.
51. (Original) The data communications device of claim 50 wherein the transfer circuit, under direction of the controller, (i) transfers packets of the particular packet flow having a first priority prior to receipt of the reply signal, and (ii) transfers packets of the particular packet flow having a second priority that is different than the first priority after receipt of the reply signal.

52. (Original) The data communications device of claim 50 wherein the transfer circuit, under direction of the controller, (i) transfers packets of the particular packet flow having a first size prior to receipt of the reply signal, and (ii) transfers packets of the particular packet flow having a second size that is different than the first size after receipt of the reply signal.
53. (Original) The data communications device of claim 50 wherein the controller, in response to the reply signal, is configured to attempt to plan the scheme change for a packet flow that is different than the particular packet flow.
54. (Currently amended) The data communications device of claim 46 wherein the reply signal accepts the scheme change, and the feedback circuit is configured to:
- ~~(i) receive, from the source, a reply signal accepting the scheme change; and~~
  - (ii) instruct the controller to change, in response to the reply signal, the initial policy scheme to the new policy scheme such that the transfer circuit transfers packets of the particular packet flow based on the new policy scheme rather than the initial policy scheme.
55. (Currently amended) The data communications device of claim 46 wherein the feedback circuit is configured to:
- (i) detect an occurrence of a timeout condition indicating that, since the change signal was provided, a timeout period has elapsed without receiving a ~~the~~ reply signal from the source; and
  - (ii) instruct the controller to change, in response to the occurrence of the timeout condition, the initial policy scheme to the new policy scheme such that packets of the particular packet flow subsequently are

transferred based on the new policy scheme rather than the initial policy scheme.

56. (Currently amended) A data communications device for managing a flow of packets, comprising:

a transfer circuit that transfers packets of a particular packet flow from input ports to output ports of the data communications device based on an initial policy scheme controlling an initial manner in which the packets are transferred from the input ports to the output ports of the data communications device;

a controller, coupled to the transfer circuit, that plans a scheme change to change the initial policy scheme to a new policy scheme in response to a particular transfer condition within the data communications device existing while the transfer circuit transfers the packets of the particular flow based on the initial policy scheme, the new policy scheme controlling a new manner in which the packets are transferred from the input ports to the output ports of the data communications device; and

feedback means for providing a change signal to a source of the particular packet flow, the change signal indicating that the data communications device has planned the scheme change,

wherein the data communications device is a first computerized node of a network, the source of the particular packet flow is a second computerized node of the network coupled to the first computerized node by a packet transmission medium, and the feedback means is operative when providing the change signal to cause the transmission of a change signal packet into the network destined for the second computerized node,

and wherein the feedback means is further operative to:

accept a reply signal from the source; and



instruct the controller to (1) change the initial policy scheme to the new policy scheme when contents within a reply field of the reply signal represent a first value, and (2) maintain the initial policy scheme when the contents within the reply field of the reply signal represent a second value that is different than the first value.-

57. (Original) The data communications device of claim 56 wherein the initial policy scheme is an initial packet dropping scheme for dropping packets from the particular packet flow, and wherein the new policy scheme is a new packet dropping scheme for dropping packets from the particular packet flow in a manner that is different than that of the initial packet dropping scheme.
58. (Original) The data communications device of claim 56 wherein the initial policy scheme is an initial packet scheduling scheme for scheduling packets of the particular packet flow for transmission, and wherein the new policy scheme is a new packet scheduling scheme for scheduling packets of the particular packet flow for transmission in a manner that is different than that of the initial packet scheduling scheme.
59. (Original) The data communications device of claim 56 wherein the initial policy scheme is an initial packet classification scheme for classifying packets of the particular packet flow, and wherein the new policy scheme is a new packet classification scheme for classifying packets of the particular packet flow in a manner that is different than that of the initial packet classification scheme.

60. (Currently amended) The data communications device of claim 56 wherein the reply signal directs the data communications device to cancel the scheme change, and the feedback means includes:
- ~~(i) means for receiving, from the source, a reply signal directing the data communications device to cancel the scheme change; and~~
  - (ii) means for instructing the controller to cancel the scheme change in response to the reply signal.
61. (Original) The data communications device of claim 60 wherein the transfer circuit, under direction of the controller, (i) transfers packets of the particular packet flow having a first priority prior to receipt of the reply signal, and (ii) transfers packets of the particular packet flow having a second priority that is different than the first priority after receipt of the reply signal.
62. (Original) The data communications device of claim 60 wherein the transfer circuit, under direction of the controller, (i) transfers packets of the particular packet flow having a first size prior to receipt of the reply signal, and (ii) transfers packets of the particular packet flow having a second size that is different than the first size after receipt of the reply signal.
63. (Original) The data communications device of claim 60 wherein the controller, in response to the reply signal, is configured to attempt to plan the scheme change for a packet flow that is different than the particular packet flow.
64. (Currently amended) The data communications device of claim 56 wherein the reply signal accepts the scheme change, and the feedback means includes:

- (i) means for receiving, from the source, a reply signal accepting the scheme change; and
- (ii) means for instructing the controller to change, in response to the reply signal, the initial policy scheme to the new policy scheme such that the transfer circuit transfers packets of the particular packet flow based on the new policy scheme rather than the initial policy scheme.
65. (Currently amended) The data communications device of claim 56 wherein the feedback means includes:
- (i) means for detecting an occurrence of a timeout condition indicating that, since the change signal was provided, a timeout period has elapsed without receiving a the reply signal from the source; and
- (ii) means for instructing the controller to change, in response to the occurrence of the timeout condition, the initial policy scheme to the new policy scheme such that packets of the particular packet flow subsequently are transferred based on the new policy scheme rather than the initial policy scheme.
66. (Currently amended) The data communications device of claim 56 wherein the feedback means includes:
- means for enabling the controller to process the scheme change based on one of (i) a the reply signal from the source, and (ii) an absence of the reply signal from the source.
- 67 - 69. (Cancelled)